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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,157	03/23/2004	Richard L. Sandstrom	2003-0022-01	4818

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CYMER INC  
LEGAL DEPARTMENT  
17075 Thornmint Court  
SAN DIEGO, CA 92127-2413

EXAMINER
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NGUYEN, PHILLIP

ART UNIT	PAPER NUMBER
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2828

MAIL DATE	DELIVERY MODE
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05/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/808,157

Applicant(s)

SANDSTROM ET AL.

Examiner

Phillip Nguyen

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-127 is/are pending in the application.
- 4a) Of the above claim(s) 13-28, 35-42, 55-70, 77-84, 97-112 and 119-126 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-34, 71-76 and 127 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 12, 43-46, 50, 54, 85-88, 92, 96 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9-11, 47, 49, 51-53, 89-91 and 93-95 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/9/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-4, 8, 12, 43-46, 50, 54, 85-88, 92 and 96 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: On page 19, lines 29-30, reference 34 is not in any drawing of Fig. 12. It is believed to be "234". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 44 and 86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite “a flexure body formed from the material of the mirror mounting frame and separated from the material of the mirror mounting frame” which is confusing because in Fig. 7-9 of the present application, the flexure body is not separated from the mirror mounting frame. The flexure body 180 and arm 188 both are integrated within the mirror mounting frame. The slots 182 and 184 do not separate the flexure body and arm from the frame. They instead provide a gap between the flexure body and the frame. It is suggested to rewrite the claims to avoid the confusion that the flexure body and frame are not separated parts.

***Double Patenting***

4. Claims 4, 8, 12, 46, 50, 54, 88, 92 and 96 are objected to under 37 CFR 1.75 as being a duplicate of claims 3, 7, 11, 45, 49, 50, 53, 87, 91 and 95, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 43 and 85 rejected under 35 U.S.C. 102(b) as being anticipated by Lloyd (5801891). Lloyd discloses in Fig. 1-4 an apparatus comprising a mirror mounting frame 12 comprising a first material and a relatively flat mounting surface area; a reflective optic 10 comprising a second material having a coefficient of thermal expansion different from that of the first material of the mounting frame (col. 2, lines 49-52); at least two attachment points of attachment between the mounting frame and the reflective optic on the mounting surface; and at least one flexure mount 14/16/18 formed in the mounting frame that is flexible in a flexure axis corresponding to a longitudinal axis of thermal expansion of the mounting frame and the reflective optic, positioned at one of the at least two points of attachment. It is noted that the flexure axis is the axis parallel to the long side of the rectangular frame and mirror. Two points of attachment are the mounting positions of the flexures to the frame, for example, the mounting pad 32 from Fig. 3. It's further noted that the preamble is not considered patentable weight when the claim body fails to provide the limitation from the preamble.

6. Claims 1-2, 43-46 and 85-88 are rejected under 35 U.S.C. 102(e) as being anticipated by Calvet et al. (US 6661962).

With respect to claims 1, 43 and 85, Calvet discloses in Fig. 3 an apparatus comprising a mirror mounting frame 302 comprising a comprising a first material and a relatively flat mounting surface area 334; a reflective optic 306 comprising a second material having a coefficient of thermal expansion different from that of the first material of the mounting frame (col. 1, lines 61-65 and col. 3, lines 24-27); at least two attachment points of attachment between the mounting frame and the reflective optic on the mounting surface; and at least one flexure mount 310A-B, 314A-B, and 308 formed in the mounting frame that is flexible in a flexure axis corresponding to a longitudinal axis of thermal expansion of the mounting frame and the reflective optic, positioned at one of the at least two points of attachment. It is noted that the flexure axis is the axis parallel to the longest side of the mounting frame 302. In this case the longitudinal direction is the direction from the top to bottom from the Fig. 3. A mounting surface 334 may include a lot of points which is considered having at least two points of attachment. It's further noted that the preamble is not considered patentable weight when the claim body fails to provide the limitation from the preamble.

With respect to claims 2, 44 and 86, Calvet further discloses the flexure mount comprising a flexure body 308 formed from the material of the mirror mounting frame 302 and "separated" from the material of the mirror mounting frame to allow relative movement between the flexure and the mirror mounting frame; at least one flexure arm 310/312 formed from the material of the mirror mounting frame and attached at one end to the mirror mounting frame and at the other end of the flexure.

Art Unit: 2828

With respect to claims 3-4, 45-46, and 87-88, Calvet discloses at least one flexure arm 310 comprises a first and second flexure arm 310A and 310B oppositely positioned on either side of the flexure body generally orthogonal to the flexure axis.

***Allowable Subject Matter***

7. Claims 5-7, 9-11, 47, 49, 51-53, 89-91, 93-95 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 29-34, 71-76 and 127 are allowed.

***Communication Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Nguyen whose telephone number is 571-272-1947. The examiner can normally be reached on 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY, can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2828

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phillip Nguyen/

AU 2828

MIN SUN OI HARVE  
PATENT EXAMINER

12